American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)
ISSN (Print) 2313-4410, ISSN (Online) 2313-4402

http://asrjetsjournal.org/

# An Analysis of the Relevance of the Garment Construction Techniques Taught at a Polytechnic in Gweru to the Clothing Industry in Gweru

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**Abstract**

The study sought to analyse the relevance of garment construction techniques taught at a polytechnic in Gweru to the Clothing industry in Gweru. Garment design, pattern making and grading, marker making, cutting, sewing/assembling, pressing and finishing were commonly practiced in all clothing sectors except that with developed countries and industries they mostly relied on Computer Aided Design, Computer Aided Manufacture (CAD CAM). A case study research design and mixed methods research was employed. Data was collected from Clothing National Diploma students, lecturers and clothing industry production managers using questionnaires, interviews, observation and document analysis. The findings revealed that the garment construction techniques taught at the polytechnic were relevant to the clothing industry in Gweru even though they did not have contemporary technologies (CAD CAM). Some students were not allowed to participate fully in the production lines due to lack of speed and accuracy. Some production managers were using students on attachment as a form of cheap labour. The research recommends that; Polytechnics should procure contemporary state of the art equipment that supports instruction, they should run continuous clothing production units that will involve students and facilitate for broadening of skills competence for the clothing industry. Polytechnics should have linkages with clothing industry that will incorporate the sharing of advanced equipment and technologies and lecturers should go for industrial attachment so as to gain exposure to contemporary equipment and technology. Industrialists should allow students to participate in all departments/sections and not take advantage of students and use them as cheap labour. Further studies could be done on the essence of setting up clothing production units in polytechnics.

***Keywords:*** clothing industry; garment construction; polytechnic; techniques.

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## 1. Introduction

Polytechnics in Zimbabwe offer among other courses, a course in Industrial Clothing Design and Construction (ICDC). The course is offered at National Certificate (NC), National Diploma (ND) and Higher National Diploma (HND) levels and it was designed to develop artisans with knowledge, skills and attitudes required in the clothing industry. Within the course the trainees are taught garment construction techniques which are covered in subjects such as Garment Design, Pattern Making and Grading, and Garment Construction (Sewing Techniques). This is in line with [1] and [2] who state that curriculum should match the developmental needs of the country. The syllabi require the trainees to go for one year (12 months) industrial work related learning, On the Job Education and Training (OJET) which would be examined at the end of the course [3]. Students on attachment are to be assessed by training officers (lecturers) at least three times. Failure to meet this requirement will result in the student not being awarded a certificate in his/her area of specialization. On industrial attachment (OJET) the trainees are expected to employ the garment construction techniques they learnt at polytechnic. Industrial attachment intends to expose students to new scientific and technological equipment and how to manipulate them as well as enabling the students to reinforce theoretical instruction through the use of applied learning facilities [4]. She further asserts that industrial attachment give students an understanding and the basic skills for every stage of production chain, the operation functions of the production process, equipment and production management.

Some clothing manufacturing companies refuse to take students on attachment citing that they would spend a lot of time teaching the attachees on garment construction techniques. [4] Argues that the industries feel that the students on attachment are not competent in practical aspects, probably as a result of inadequate training due to lack of appropriate equipment, facilities and infrastructure or lack of trained staff to operate and train students on specialized equipment or advanced techniques. As such supervisors spend more time instructing students on practical aspects for example pattern drafting and clothing construction.

According to [5] production managers indicated that involving students in the production line especially at the beginning is difficult. We fear wastage of resources when students are practicing to use machinery for the first time. This clearly shows that some students on attachment are denied the opportunity to participate fully in some departments especially the production lines. The clothing industry has advanced in technology and unfortunately the linkages between industry and institutions do not incorporate the sharing of technology and equipment [5]. As a result when students go for OJET they are not able to operate some of the equipment found in the industries. However, [6] is of the opinion that new trends and technology and manufacturing methods are easier to learn and grasp when one has a solid foundation in construction techniques. In industry time is money and therefore sometimes supervisors would rather leave the students out rather than wasting their precious time training them how to use new technologies and techniques.

In most cases students on OJET would be given preparatory tasks or even housekeeping tasks instead of placing them in the production lines where they may create bottle necks for the production process flow. A rough check through the student logbooks on attachment in 2013 and 2014 indicated that five (5) of the attachees recorded housekeeping tasks more often than garment construction tasks in their logbooks. Basing on the scenarios

reflected above, on the stance taken by clothing industries towards students on attachment, it seems as though there is a gap between the training the students get at college and what the industry expect from them. It is against this background that the researcher decided to carry out this study to analyse the relevance of the garment construction techniques employed at a Polytechnic in Gweru to the clothing industries in Gweru.

### *1.1 Research Questions*

1. Which garment construction techniques are taught at polytechnics?

2. Which garment construction techniques are employed in clothing industries?

3. What challenges are faced by students on On the Job Education and Training (OJET)?

4. What solutions can be offered to counter the challenges faced by students on attachment?

### *1.2 Research Constraints*

During the execution of this research the following challenges were encountered:

Respondents' ability to respond truthfully and openly to questions, students on attachment feared to expose the supervisors/managers' practices: the researcher assured the respondents that their contributions would be treated with strict confidence. The researcher's role as a training officer and assessor of students on attachment may have influence on the results: the researcher tried to be as neutral as possible. Data collection could have been enhanced through regularly observing students on attachment performing in different departments/sections: only thre observations were made.

### *1.3 Literature Review*

#### *1.3.1 Garment construction techniques taught at polytechnics*

According to [7] polytechnics in Zimbabwe teach the following garment construction techniques: Designing, Pattern making and grading, Marker making and cutting, sewing/assembling and finishing/pressing. There syllabi indicate that students should use CAD CAM technologies, in designing, pattern making and grading, and marker making.

#### *1.3.2 Garment construction techniques used in the clothing industries*

Designing, Pattern making and grading, Marker making and cutting, sewing/assembling and finishing/pressing. A study by [8] indicated that clothing industries in China were using CAD methods in 3D garment design technology. In America TUKATECH centers provide computer stations for designing, pattern making, grading, marker making and cutting at minimum cost to the extent that a young entrepreneur can walk into a Tuka center to use the computers for designing, pattern making and grading and have the garments cut for small hourly fee [9]. In Zimbabwe such facilities are not available to offer CAD/CAM operations neither to entrepreneurs nor to

college for students.

### *1.3.3 Challenges faced by students on OJET*

The challenges faced by students on attachment were summarized by [5] as follows: Skills competence, lack of resources, experience and practice. Other researchers [4] also noted that lack of trained staff to operate and train students on specialized equipment or techniques may also deprive students the practice when they are at college.

## 2. Materials Methods

### *2.1 Research Design*

The case study research design was used. According to [10] and [11] a case study is a way of organizing data for the purpose of reviewing social reality and it also examines a unit which maybe a person, family or an institution as a whole. Case studies can blend numerical and qualitative data and they are a prototypical instance of mixed methods research [12].

Case study design allows the collection of data using various instruments. It allows methodological triangulation which can help establish the degree of data's internal validity [13]. This study was based on a polytechnic students and staff in the clothing department in Gweru and clothing companies production managers in Gweru.

### *2.2 Population*

Population refers to a large group of people that have one or more characteristics in common and are of relevance to the researcher [14]. A total of ten (10) clothing ND3 students and four (4) lecturers at Gweru Polytechnic in the Clothing Department, eleven (11) ND2 clothing students on OJET and six (6) production managers from clothing industries in Gweru constitute the target population.

### *2.3 The Sample*

According to [10] a sample is a small portion of a population selected for observation and analysis. The sample comprised of ten (10) ND3 clothing students at the polytechnic, three (3) lecturers, six (6) ND2 Students on OJET and four (4) production managers. This gave a total of twenty three (23) respondents for the study, which corresponds to 74% of the population under study which is supported by [11] when they say that the bigger the sample the more representative it is.

### *2.4 Sampling procedure*

The study used all the ten (10) ND3 students at the polytechnic who had completed OJET as they were considered to be a small number to work with. Probability sampling technique of stratified random sampling was used to select four (4) out of six (6) clothing production managrs/supervisors and six (6) ND2 students on OJET. The companies were divided into two (2) homogenous groups that is government and private companies. Non-probability sampling technique of purposive sampling was used to select the supervisors from each group

of companies. The supervisors were the people responsible for students on attachment and will therefore enable the researcher to answer the research questions.

Purposive or judgmental technique was used to select the three (3) lecturers at the polytechnic who taught garment construction techniques at the polytechnic. A purposive or judgmental sampling enables you to use your judgment to select the cases that will enable you to answer your research questions and to meet your objectives [13].

### *2.5 Instrumentation*

Instruments are tools or methods which can be used to collect data [15]. Such methods include questionnaires, interviews, observation and content analysis. Questionnaires, interview guide and document analysis were used so as to ensure validity and reliability.

#### *2.5.1 Questionnaires*

A document containing questions whose purpose is to elicit some responses from respondents [15]. Other researchers [16] refer to it as that form of enquiry which contains a systematically compiled and organized series of questions that are sent to the population samples. Structured questionnaires were used to collect data from the ND clothing students and the lecturers because it contains definite, concrete and directed questions which make it easier for the respondents to follow and answer. Questionnaires guarantee anonymity so respondents are free to respond to questions without fear of being identified [15].

#### *2.5.2 Interview*

An interview is a face to face conversation in which the interviewer tries to get information from the interviewee [16] and [17]. Structured interviews provided firsthand information of personal experiences amongst clothing production managers. There is greater flexibility in that the interviewer can repeat or rephrase questions so that they sound clearer to the interviewee. The researcher is able to follow a person's thinking and explore issues to obtain in-depth data [15].

#### *2.5.3 Observation*

The observation method is useful in finding out the answers to verify results of an interview or questionnaire. [18] Neuman identifies two observation methods which are: participant and non-participant observation. In this study non participant observation was used to observe the attachees when using the industrial tools and equipment. Six (6) ND2 students on OJET were observed while doing work in different departments.

#### *2.5.4 Document Analysis*

Document analysis broadly describes a heterogeneous domain of techniques which are focused upon the more or less systematic objectives and quantitative description of a communication or series of communications [17].

Document analysis was used to analyze the log books for ND2 students on OJET and ND3 students who had completed attachment and their time tables for garment construction lectures. Document analysis enabled the researcher to see how the students were performing in different departments during OJET and how much time the students were allocated on their polytechnic departmental time table for garment construction lessons.

### *2.6 Data collection procedure*

Questionnaires were distributed to the ND students at the polytechnic and the clothing lecturers by hand when it was convenient for the participants. Interviews were scheduled with the production supervisors/managers at clothing companies in Gweru when it was convenient for the participants. A visitation schedule for clothing industries was prepared and each company was visited three (3) times. Students were observed in different departments and their logbooks were assessed on each visit.

### *2.7 Data Management*

Data collected was coded and entered into the computer. The data collected using questionnaires, interviews, observation and document analysis was analyzed basing on the responses given by the participants. Quantitative analysis of the data was done where by figures were used to summarize the responses from the participants. Qualitative analysis of detailed explanations accompanied the figurative representation of data.

## 3. Results and Discussion

**Table 1:** Garment construction techniques taught at the polytechnic

| | **Student (16)** | | **Lecturer (3)** | |
|---|---|---|---|---|
| | YES % | NO % | YES % | NO % |
| Designing | 100 | 0 | 100 | 0 |
| Pattern making and grading | 100 | 0 | 100 | 0 |
| Marker making | 100 | 0 | 100 | 0 |
| Sewing/assembling | 100 | 0 | 100 | 0 |
| Finishing and pressing | 100 | 0 | 100 | 0 |

On Table 1 all (100%) students and all the lecturers were in agreement that all the mentioned garment construction techniques were taught at the polytechnic.

A summary of responses given in Table 2 revealed that both 100% students and 100% lecturers agreed that students mostly use the make through garment production system in which one student works on all processes involved in assembling a complete garment. The students and lecturers also indicated that they sometimes make use of straight/synchronized garment production system especially when they are involved in production units for example when students are working on production of curtain or safety clothing for the college or community. Sectional and progressive bundle production systems were not used at the polytechnic.

**Table 2:** Garment production systems students often use during training

| | Student (16) | | Lecturer (3) | |
|---|---|---|---|---|
| | YES | NO | YES | NO |
| Make through | 100 | 0 | 100 | 0 |
| Straight line/synchronized | 100 | 0 | 100 | 0 |
| Sectional | 0 | 100 | 0 | 100 |
| Progressive bundle | 0 | 100 | 0 | 100 |

**Table 3:** Time taken to complete one coursework garment for example skirt/blouse/dress.

| Time | Student (10) | Lecturer (3) |
|---|---|---|
| Less than a week | 0 | 33 |
| 2 weeks | 100 | 33 |
| More than a month | 0 | 34 |

Data presented on Table 3 shows 100% students and one lecturer (33%) indicated that they usually need two (2) weeks to complete one coursework garment. On the other hand another lecturer (33%) said that students require less than a week whilst the other one said more than a month. The other lecturer said students need a month. Documents analyzed revealed that some subjects were time tabled once or twice a week ranging from 6-10 hours a week. All the lecturers indicated that the polytechnic did not have any computerized technologies even though they are listed on the ministry's syllabi [7].

**Table 4:** Relevance of garment construction techniques taught at the polytechnic to the clothing industry**.**

| Students (16) | Lecturers (3) |
|---|---|
| They are relevant because we were able to work on different processes and garments we learnt at college when we went to industry | They are relevant because the students are taught the basic garment construction techniques required in the industry |

Findings in table 4 revealed that both the students and lecturers concurred that the garment construction techniques taught at the polytechnic were relevant to the clothing industry as they covered most of the basic processes applied when constructing various types of garments in the industry.

***3.2 Garment construction techniques used in clothing industry***

**Table 5:** Departments /sections found at the company of attachment and time spent in each area**.**

| Department/section | Time spent Not allowed | 1 week | 2-4 weeks | 5-8 weeks | Above 8 | Not available | TOTAL % |
|---|---|---|---|---|---|---|---|
| Design room | 0 | 25 | 25 | 0 | 0 | 50 | **100** |
| Cutting room | 0 | 50 | 50 | 0 | 0 | 0 | **100** |
| Production | 0 | 0 | 0 | 50 | 50 | 0 | **100** |
| Finishing | 0 | 37 | 50 | 0 | 13 | 0 | **100** |
| Dispatch | 0 | 50 | 50 | 0 | 0 | 0 | **100** |

A summary of responses as given in Table 5 reflects that 50% of the students on attachment were attached to companies or organizations without a design department/section. 25% spent one week in the design department/section which may be too little for an amateur to master all the necessary skills required for designing and pattern making. Only 50% were given moderate time which was between 2 and 4 weeks. 50% of the students spent one week in the cutting room while another 50% spent 2-4 weeks. 50% of the students spent 5-8 weeks in the production section while 60% spent more than 8weeks. In the finishing department/section 37% of the students spent one week, 50% spent 2-4 weeks and 13% above 8 weeks. In the dispatch section 50% of the students spent one week while the other 50% spent 2-4 weeks.

**Table 6:** Garment construction techniques which students were allowed to employ in the clothing industry.

| | YES | Percentage | NO | Percentage | TOTAL % |
|---|---|---|---|---|---|
| Designing using CAD | 0 | 0 | 16 | 100 | **100** |
| Pattern making using CAD | 0 | 0 | 16 | 100 | **100** |
| Marker making and cutting using CAD | 0 | 0 | 16 | 100 | **100** |
| Sewing in the production lines | 10 | 63 | 6 | 37 | **100** |
| Finishing and pressing | 16 | 100 | 0 | 0 | **100** |

Data presented in Table 6 shows that 100% of the students indicated that they did not use CAD in Designing, Pattern making and Marker making during their period of OJET at the company of attachment.

Responses from interviews with production managers from clothing companies in Gweru confirmed that their companies did not have any computerized technologies like CAD which they were using in clothing production. Documents analyzed also confirmed that the students did not use any CAD systems during their attachment period as this was not recorded anywhere in their logbooks. 63% of the students said that they were allowed to

participate in the production lines. On the other hand 37% were not allowed to work in the production lines.

**Table 7:** Additional training for students on attachment

| Additional training needed | frequency | % |
|---|---|---|
| Speed and accuracy | 3 | 75 |
| Non | 1 | 25 |
| **TOTAL** | **4** | **100** |

From table 7 above 75% of the production managers thought that there was need for additional training for students at their companies of attachment in speed and accuracy. This was also confirmed by students when they stated that one of their challenges on attachment was of speed and accuracy. Only 25 % of the production managers were content that the students did not require any additional training at the company of attachment.

### *3.3 Challenges faced by students on attachment*

Data presented in table 8 revealed that inadequate practice and exposure to some industrial sewing equipment at college was the major challenge for students and lack of speed and accuracy. Production managers complained that students were too slow especially at the beginning such that the managers could not meet their targets if they allowed students in production lines.

Students also mentioned the issue of using eye judgment and not use pins during sewing. Students, lecturers and production managers said that students were not allowed to use specialized equipment as well as to sew complicated designs like tailored suits.

It was also reported that students were given cleaning duties more often than sewing. This was evidenced by the data recorded in their logbooks.

Students complained of being used as cheap labor in some companies where the managers would let the students work in the production lines long after working hours in some cases up to 2300 hours in which students would neither be paid a single cent nor given transport home.

The table 9 above reveals that 2 (50%) of the production managers in the companies in Gweru had Certificate of attendance as their highest qualification. One (25%) had a national certificate and the other one (25%) had a National Diploma which are quite good qualifications for they may possess enough knowledge and skills to supervise students on OJET.

### *3.4 Discussion and Interpretation of Findings*

#### *3.4.1 Which garment construction techniques are taught at polytechnic?*

Literature and research findings revealed that garment design, pattern making and grading, marker making and cutting, sewing/assembling and finishing and pressing were the garment construction techniques taught at the polytechnic in Gweru as outlined in [3] clothing syllabi. There were no computerized technologies at the polytechnic and students were covering CAD CAM topic in theory only. As such students were doing manual designing, pattern making and grading as well as marker making even though the syllabi stated that they should use CAD CAM practically.

**Table 8:** Challenges faced by students on attachment

| **Students (10)** | **Lecturers (3)** | **Production managers (4)** |
|---|---|---|
| -lack of speed and accuracy<br><br>-use of eye judge for measuring seam allowances.<br><br>-not allowed to use pins.<br><br>-not allowed to use specialized machines.<br><br>-not allowed to sew on complicated design such as tailored suit.<br><br>-given cleaning duties more often than sewing.<br><br>-lack of practice and experience in the use of some industrial equipment led in us not being allowed to participate eg in cutting.<br><br>-used as form of cheap labor.<br><br>-working in production lines up to 2300hours | -students not allowed to sew in production lines<br><br>-students not allowed to use specialized machines.<br><br>-students used as form of cheap labor.<br><br>-students given menial jobs more often than sewing. | -students not able to operate specialized machines<br><br>-students being too slow, such that the managers could not meet their targets due to lack of speed and accuracy. |

**Table 9:** Mentor qualifications

| **Qualification** | **Frequency** | **%** |
|---|---|---|
| Certificate of attendance | 2 | 50 |
| National Certificate | 1 | 25 |
| National Diploma | 1 | 25 |
| **In-house training** | **0** | **0** |
| **TOTAL** | **4** | **100** |

The study revealed that on average students took 2 weeks to complete a coursework garment for example a skirt, shirt or dress. This contradicts with what the clothing industrialists expect which is usually 25-45 minutes for a skirt/ shirt/blouse and 40-60 minutes for a dress or trousers [19]. Other researchers [5] attribute this to lack of practice due to limited machinery as students may spend a lot of time waiting to stitch. This has an adverse impact on their performance when they get to the industry for the OJET. At the polytechnic students used the make through garment production systems to construct their coursework garments in which one student works on all processes involved in assembling a complete garment. This can enhance multi skills application in students which is rarely the case in the industry as it mainly focus on the division of labor and specialization of tasks/processes. It is of an advantage for students to know the basic construction skills for different types of garments because they do not know what type of garments would be worked on at the company of attachment as some clothing production companies specialize in one type of garments whilst some in a variety of clothing items. Sometimes when in production units they use straight line/synchronized garment production system. Literature revealed that this only happens when they have orders in the production unit like an order of 500 hostel curtains 100 work suits for non-lecturing staff and 200 school uniforms for a local school yet continuous running of these production units may facilitate practice and experience in speed and accuracy in the students.

The garment construction techniques taught at the polytechnic were relevant to the clothing industry in Gweru. This may be supported by the HEXCO Clothing syllabi which acknowledged that some industrialists put forward their contributions during the syllabi review and the content was produced according to competences required for different personnel in the clothing industry [3]. However literature and findings revealed that all the garment construction techniques taught at the polytechnic such as designing, pattern making and grading, marker making are done manually yet current trends with other polytechnics in developing countries like Ghana and Kenya as well as in developed countries like United Kingdom, Scandinavia and Hong Kong use computerized technologies as their daily tools for construction and grading patterns as well as marker making [4,20,21,22]

### *3.4.2 Garment construction techniques used in clothing industry*

The study found out that garment design, pattern making and grading, marker making, cutting, sewing/assembling and finishing and pressing were the garment construction techniques used in the clothing industries in Gweru. No computerized technologies (CAD CAM) were being used. Clothing industries in Japan, America, Spain, France and China were using commercial software of 2D and 3D garment CAD in designing, pattern making and grading as well as marker making, as demonstrated in [8]. Findings revealed the local industry is still stuck with tape measure, pencil, ruler and rubber which means that all their designing, pattern making and grading is manually done. Most of the companies in Gweru private or government owned are small and it may be difficult for them to purchase CAD CAM software and hardware yet according to contemporary global trends it is imperative for them to use CAD CAM because it is fast and efficient. In other countries like America there are TUKA TECH centres where entrepreneurs and other companies without CAD CAM may sub contract their pattern making and grading as well as marker making operations [9].

### *3.4.3 Challenges faced by students on attachment*

Literature and findings revealed that the major challenge that students faced on OJET was lack of speed and accuracy due to lack of practice and experience during training at college. The majority of the managers interviewed said that the students needed additional training in speed and accuracy. They indicated that this was the major reason why they could not allow students to participate fully in the production lines because the "students were too slow such that the managers could not meet their targets". Managers feared that they would produce substandard garments and also would not meet their targets if they work with students in production lines [5].

The study established that students were not allowed to operate specialized machinery and work on complicated designs such as tailored suits. This is similar to what was found by other researchers [5] who noted that due to limited practice or lack of exposure to some equipment at college, students could not fully utilize the facilities at industry. According to the HEXCO syllabi [7] the students should work on complicated designs at college but they only do that once when they produce their course work garments. Lack of practice contributes to them failing to perform when they go for OJET.

Findings have also shown that while some students were not allowed to participate in the production lines, others were being overworked as they were taken as some form of cheap labor. One of the students indicated on the questionnaire that they were working on graduation gowns up to as late as 2300 hour every day without being paid a single cent even transport fares.

Findings revealed that some production managers/supervisors who mentored students on attachment had a qualification of certificate of attendance implying that they had low level qualification yet they had to supervise National Diploma students. According [5] sometimes students are attached or supervised by people with low level qualifications. These people might not be able to explain properly why things are to be done the way they are done.

## 4. Conclusion

Basing on the findings, it can be concluded that garment design, pattern making and grading, marker making, cutting, sewing/assembling, pressing and finishing are the garment construction techniques taught at a polytechnic in Gweru and there were no computerized technologies (CAD CAM) used in the teaching of these techniques. Clothing industries in Gweru also use the same garment construction techniques and they also do not have CAD CAM. Therefore the garment construction techniques employed at the polytechnic were relevant to the clothing industry in Gweru even though they did not use any computerized technologies. The study has shown that some clothing industries in Gweru did not have design and pattern making sections/departments because they specialize in same type of garment for example safety clothing or school wear hence they retrace their patterns when they get old and tattered. This negatively hampers on the spirit of creativity and innovation on the students on OJET.

Students were taking an average of two weeks to complete a coursework garment like a skirt/ blouse/ dress. This was affected by the time that was allocated to garment construction subject on the time table in which the time

ranged from 6-10 hours a week.

The major challenge that the students faced on OJET was speed and accuracy. Some production managers did not allow students on OJET to participate fully in the production lines because they felt that students were not competent in practical aspects as a result of lack of practice and experience. Some production managers put students on the production lines because they regarded them as some form of cheap labor.

## 4. Recommendations

The study came up with the following recommendations:

- The Ministry of Higher and Tertiary Education, Science and Technology Development should assist polytechnics in procuring state of the art equipment and technologies like CAD CAM at ministerial level from developed countries such as China and Japan through the government's look West Policy.
- Polytechnics should run continuous production units that will involve students and facilitate for the broadening of skills competence for the clothing industry.
- Polytechnics should have linkages with clothing industry that will incorporate the sharing of advanced equipment and technologies as well as assist in development of relevant curriculum.
- Polytechnic should vigorously pursue the idea of having lecturers going for industrial attachment at advanced companies in the country or region so as to gain exposure to contemporary equipment and technology.
- Industrialists should allow students to participate in all departments/sections and teach them how to operate specialised equipment and technologies not found at college and not take advantage of students and use them as cheap labour.
- Further studies could be done on the essence of setting up clothing production units in polytechnics in Zimbabwe.

## Acknowledgements

I would like to extend my sincere gratitude to the following:

- the principal, staff and students in the clothing department at Gweru Polytechnic who facilitated data collection.
- production managers and supervisors at clothing manufacturing companies in Gweru who facilitated data collection.
- my family for the moral and financial support they gave me throughout study. May the dear Lord bless you.

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